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	United States Environmental Protection Agency Washington, DC 20460 Work Assignment					Work Assignment Number 3-55 Other Amendment Number:			
EPA									
Contract Number		2012	2 Title of Work Assignment/SF Site Name						
EP-C-08-010 Base Option Period Number 3						Hlth Adj Life Yrs. White Paper			
Contractor Specify Section and paragraph of Contract SOW									
SCIENTIFIC CONSULTING GROUP, INC, THE 2-2									
Purpose: X Work Assignment Close-Out						Period of Performance			
Work Assignment Amendment Incremental Funding									
Work Plan Approval						From 01/25/2012 To 11/30/2012			
Comments:									
Superfund	-	Acco	ounting and Appro	priations Data	3		X	Non-Superfund	
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.									
SFO (Max 2)									
OCN Pu	deat/EV Appropria	tion Budget Org/Code	Program Element	Object Class	Amount (0	Oollars) (Cents)	Site/Project	Cost Org/Code	
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Authorized Work Assignment Ceiling Contract Period: Cost/Fee: LOE:									
12/16/2008 To 11/30/2012									
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Total:									
Work Plan / Cost Estimate Approvals									
Contractor WP Oated: Cost/Fee:						LOE:			
Cumulative Approved: Cost/Fee:						LOE:			
Work Assignment Manager Name Michael Broder						Branch/Mail Code:			
•						Phone Number 202-564-3393			
(Signature) (Date)						FAX Number:			
Project Officer Name Verla Sutton-Busby						Branch/Mail Code:			
		Pho	Phone Number: 202-564-6808						
(Signature) (Date)						FAX Number:			
Other Agency Official Name)		Branch/Mail Code:						
		Pho	Phone Number:						
(Signature) (Date)						FAX Number:			
Contracting Official Name Renita Tyus						Branch/Mail Code:			
						Phone Number: 513-487-2094			
(Signature) (Date)						Number: 513-48			

PERFORMANCE WORK STATEMENT

Contract Number EP-C-08-010 Scientific Consulting Group Work Assignment Number: 3-55

Title:

Heath Adjusted Life Years White Paper

Scope of Work Reference:

Task: 2.2

Period of Performance:

Date of Issuance through November 30,

2012

Work Assignment COR:

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A. BACKGROUND

Historically disease burden has been measured based on incidence of morbidity and mortality. However, these metrics fail to address the burden on individuals and society in terms of cost and suffering. Health Adjusted Life Years (HALYs) are generally broken into two criteria: Disability Adjusted Life Years (DALYs) which are generally focused on the medical costs; Quality Adjusted Life Years (QALYs) which include the decline in the quality of life (i.e., pain and suffering); and Morbidity Inclusive Life Years" (MILYs) which addresses both concerns of life extension and quality of life issues. HALYs can be used, along with other metrics, to evaluate the impact of regulatory interventions.

B. PURPOSE

For several decades EPA has developed risk assessments for the purpose of protecting human health. Historically, EPA and other regulatory and monitoring entities have reported impacts in terms of incidence of disease without considering the financial cost to the individual and to society. As a result, the most basic assessments about the health of a community or the impact of an intervention goes largely unrecognized.

The development of HALYs provides such a mechanism. Currently HALYs come in two "flavors:" Quality Adjusted Life Years (QALYs) and Disability Adjusted Life Years (DALYs). The two methods differ in their origin: In brief, QALYs were developed to assess the cost effectiveness of intervention while DALYs were developed to estimate global burden of disease. Morbidity Inclusive Life Years (MILYs) combines aggregation of life extension and quality of life impacts. In these cases the intent was to develop a quantitative method to determine the most efficient means of allocating limited resources to moderate the impact of disease. This product will help EPA select how to use these different metrics when evaluating the impact of multiple stressors.

C. KNOWLEDGE AND SKILLS REQUIRED

Contractor staff assigned to this task should have some experience with EPA guidelines and "white papers." In addition, the staff shall possess particular expertise in risk assessment, multiple stressor analysis, cost benefit analysis, cost effectiveness analysis, and the use of economics in health policy, to effectively develop a document that lays out the merits of the different HALYs, and methods and data sources for conducting the assessments.

D. TASKS

Task 1. Prepare the Work Plan and Cost Estimate

The Contractor shall prepare a work plan and cost estimate with the breakdown of the level-of-effort and other essential items.

Task 2. Establish Communication

Within two (2) weeks of receiving the work assignment, the contractor shall convene a conference call with the COR, workgroup members, and appropriate contractor staff to clarify outstanding questions and confirm the schedule and specific tasks for the work assignment. The contractor shall initiate additional communication with the COR should developments arise that will affect the conduct or schedule of the assignment.

Task 3. Document Development

The Contractor shall develop a document that lays out the components and strategies for selecting the most appropriate cost effectiveness metric for the application, sources of data/information, and instructions on how to conduct each. In particular the Contractor shall:

- Lay out the background for each of the approaches (i.e. QALY, DALY, MILY);
- Discuss the relative merits of each (listing pros and cons);
- Discuss when one is favored over the other, in particular citing the standard use by significant national and international ("main stream") organizations;

- Discuss how one is used in conjunction with the other or other metrics (e.g., morbidity, mortality);
- Identify "main stream" organizations (WHO, NIH, CDC, UN) who use HALYs and the methods employed;
- Consider how these organizations conduct quality assurance and validate the model inputs and list defaults and other assumptions; and
- Make recommendations for the standard application of HALYs.

The Contractor shall deliver an electronic version (MS Word 2007) of the draft document to the EPA WA COR.

Task 4. Delivery of the Final Product

The Contractor shall deliver three bound hard copies and an electronic version (MS Word 2007) of the revised deliverable addressing comments raised by the EPA COR on the draft version.

E. SCHEDULE AND DELIVERABLES

Product	Due Date			
Task 1. The Contractor shall prepare a work	Within 15 calendar days following receipt of			
plan and cost estimate.	Work Assignment			
Task 2. The Contractor shall convene a	Within fourteen calendar days following			
conference call with the EPA WA COR,	receipt of Work Assignment			
workgroup members, and appropriate				
contractor staff to discuss the work plan, and to				
clarify outstanding questions, confirm the				
schedule and address outstanding issues.				
Task 3. The Contractor shall develop and	Within Sixty calendar days following Task 2			
deliver the draft document addressing the items				
listed in the task description.				
Task 4. The Contractor shall deliver a final	Twenty four calendar days following receipt of			
electronic version (MS Word 2007) of the draft	comments from the EPA WA COR.			
document to the EPA WA COR.				

F. Acceptance Criteria

Final products shall be produced by the Contractor upon the EPA WA COR's approval through written technical direction. The Contractor shall provide all materials written as part of these tasks to the EPA WA COR, as per work assignment, in electronic format. Electronic versions shall be in MS Word 2007, PowerPoint 2007 and Excel 2007 computer format.

G. MANAGEMENT CONTROLS:

Periodic meetings between the EPA and Contractor work assignment managers are encouraged to discuss any questions that may arise during performance or completion of this work assignment. At the EPA WA COR's discretion, these meetings may occur via teleconference or video

conferences. The Contractor shall document these meetings and submit copies of this correspondence to the EPA WA COR.

The EPA WA COR may identify one or more EPA technical representatives for this work assignment. Interaction between the Contractor and any EPA technical representative(s) designated by the EPA WA COR is solely for the purpose of presenting and discussing the information, analyses, results, or presentations related to this work assignment. The interaction will be technical communication vice technical direction. Per the technical direction clause EPAAR 1552.237-71 of the contract, the EPA PO COR and the EPA WA COR or alternate EPA WA COR are the only representatives of the CO authorized to provide technical direction.

Per the technical direction clause, the CO and PO will be provided with copies of all technical direction.

H. CONFIDENTIALITY

Some of the information to be edited under this task may be internal information that is not ready for public distribution. The Contractor shall not discuss the contents of the document with anyone not specified as a participant in the document review process or its preparation.